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10/715,768

11/18/2003

Robert Gentile

GER-GB03

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EXAMINER

TORIMIRO, ADETOKUNBO OLUSEGUN

ART UNIT

PAPER NUMBER

3714

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/715,768

Applicant(s)

GENTILE, ROBERT

Examiner

Adetokunbo O. Torimiro

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/18/2003</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9,26-37,41-44,47,49,50,53-56, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrimmer et al (US 6,042,487) in view of Dykstra et al (US 5,066,011).

Re claim 1: Schrimmer et al teaches a high impact ball (10) comprising: at least one surface deviation / *dimples* (44) disposed relative to the spherical member of the core structure (34); at least one corresponding surface deviation disposed relative to the spherical casing (40) in a mating relationship with the at least one surface deviation (44) disposed relative to the spherical member of the core structure (**see fig.2; col.5, lines 25-35**).

However, Schrimmer et al does not explicitly teach a core structure comprising a spherical member; a spherical casing concentrically disposed relative to the spherical member of the core structure.

Dykstra et al teaches a high impact game ball (10) comprising: a core structure (12) comprising a spherical member (**see fig.2; col.2, lines 5-11**); a spherical casing concentrically disposed relative to the spherical member of the core structure (**see fig.2; col.2, lines 12-13**).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made this combination of the teachings of Dykstra et al and Schrimmer

Art Unit: 3714

et al to include dimples in the high impact ball so as to provide a ball with a specific aerodynamic to the ball and also to invent a ball that looks and feels very similar to the common and already known types of balls; and also to have spherical members in the ball so as to have a well symmetric invention.

Re claims 2-4 and 49: Schrimmer et al teaches the high impact game ball wherein the at least one surface deviation disposed relative to the spherical member of the core structure comprises a registration projection and wherein the at least one surface deviation disposed relative to the spherical casing comprises a registration indentation (34) that corresponds to the registration projection (22,24); wherein the registration projection comprises a post that projects from the spherical member of the core structure and into the registration indentation of the spherical casing; wherein there are a plurality of registration projections (22,24) that project from the spherical member of the core structure and into corresponding registration indentations of the spherical casing (see fig.2; col.4, lines 19-25; col.5, lines 25-29; and col.6, lines 54-56). **It is apparent to Examiner that the connector and the inner core portion of Schrimmer's invention serve the same function as the registration projection and registration indentation respectively. It is obvious that these parts of the ball keep the circuitry in place and allows them to move in order to make the ball perform the intended function.**

Re claim 5: Schrimmer et al teaches wherein each of the plurality of registration projections comprises a metal post (see fig.2; col.4, lines 12-15; col.6, lines 45-48). **It is**

Art Unit: 3714

**apparent that for a ball construction like this, the connector has to be made of a metallic conductor so as to withstand the hit the ball will receive.**

Re claim 6 and 50: Schrimmer et al teaches the high impact ball (10) further comprising a switching arrangement embedded in the spherical member of the core structure wherein the switching arrangement comprises a means for sensing an activation condition relative to the switching arrangement, a means for triggering a response upon an occurrence of the activation condition, and a means for exhibiting the response based on the occurrence of the activation condition (see col.5, lines 36-49).

Re claims 7-9 and 42-44: Schrimmer et al teaches a high impact ball (10).

However, Schrimmer et al fails to teach the high impact ball wherein the means for sensing an activation condition comprises a means for sensing an impact relative to the high impact game ball; wherein the means for exhibiting a response based on the occurrence of the activation condition comprises a light source for being activated in response to an impact relative to high impact game ball; wherein the means for exhibiting a response based on the occurrence of the activation condition comprises a sound source for being activated in response to an impact relative to the high impact game ball.

Dykstra et al teaches the high impact ball wherein the means for sensing an activation condition comprises a means for sensing an impact relative to the high impact game ball; wherein the means for exhibiting a response based on the occurrence of the activation condition comprises a light source for being activated in response to an impact

Art Unit: 3714

relative to high impact game ball; wherein the means for exhibiting a response based on the occurrence of the activation condition comprises a sound source for being activated in response to an impact relative to the high impact game ball (**see col.2, lines 37-46**).

Therefore it would have been obvious to one of ordinary in the art at the time the invention was made to include a way to activate the response of a light source or sound source so as to produce an output of light or sound when the activation condition is satisfied.

Re claims 26-28,41, and 62: Schrimmer et al teaches the high impact game ball further comprising a luminescent layer for enabling the high impact game ball to emit light; wherein the luminescent layer comprises a sub-layer; wherein the luminescent layer comprises an outer layer (**see fig.1; col.3, lines 59-65**).

Re claims 29-32: Schrimmer et al teaches the high impact game ball further comprising an access conduit with a proximal end adjacent to the switching arrangement and a distal end in communication with an exterior surface of the high impact game ball; wherein the means for sensing an activation condition relative to the switching arrangement comprises a switch disposed adjacent to the proximal end of the access conduit; further comprising an elongated probe adapted to be received into the access conduit for triggering the switch of the switching arrangement whereby the elongate probe can be employed to induce an activation condition; further comprising an elongate probe adapted to be received into the access conduit and a means for passing power through the elongate probe whereby

Art Unit: 3714

the elongate probe can be employed to provide power to the switching arrangement (see **figs.1-3; col.5, lines 14-49**).

Re claims 33-37 and 53-56: Schrimmer et al teaches a game ball (10) comprising a spherical member; a switching arrangement embedded in the spherical member wherein the switching arrangement comprises a means for sensing an activation condition relative to the switching arrangement, a means for triggering a response upon an occurrence of the activation condition, and a means for exhibiting the response based on the occurrence of the activation condition; and an access conduit with a proximal end adjacent to the switching arrangement and a distal end in communication with an exterior surface of the game; wherein the means for sensing an activation condition relative to the switching arrangement comprises a switch disposed adjacent to the proximal end of the access conduit; further comprising an elongate probe adapted to be received into the access conduit for triggering the switch of the switching arrangement whereby the elongate probe can be employed to induce an activation condition; further comprising an elongate probe adapted to be received into the access conduit and a means for passing power through the elongate probe whereby the elongate probe can be employed to provide power to the switching arrangement; wherein the switching arrangement further comprises a rechargeable means for retaining power whereby the elongate probe and the means for passing power through the elongate probe can be employed to recharge the means for retaining power (see **figs.1-3; col.5, lines 14-49**).

Re claim 47: Schrimmer et al teaches a method for constructing a high impact ball (10) comprising: forming at least one surface deviation / *dimples* (44) disposed relative to the spherical member of the core structure (34); forming at least one corresponding surface deviation disposed relative to the spherical casing (40) in a mating relationship with the at least one surface deviation (44) disposed relative to the spherical member of the core structure (see fig.2; col.5, lines 25-35).

However, Schrimmer et al does not explicitly teach forming a core structure comprising a spherical member; forming a spherical casing concentrically disposed relative to the spherical member of the core structure.

Dykstra et al teaches a high impact game ball (10) comprising: a core structure (12) comprising a spherical member (see fig.2; col.2, lines 5-11); a spherical casing concentrically disposed relative to the spherical member of the core structure (see fig.2; col.2, lines 12-13).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made this combination of the teachings of Dykstra et al and Schrimmer et al to include dimples in the high impact ball so as to provide a ball with a specific aerodynamic to the ball and also to invent a ball that looks and feels very similar to the common and already known types of balls; and also to have spherical members in the ball so as to have a well symmetric invention.

3. Claims 10-14,44-46,51, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrimmer et al (US 6,042,487) in view of Dykstra et al (US 5,066,011) and further in view of Gick (US 2005/0005873). The teachings of Dykstra et al and Schrimmer et al



Art Unit: 3714

have been discussed above.

Re claims 10-14,44-46,51, and 52: Schrimmer et al teaches a high impact game ball (10) with means for sensing activation.

However, Schrimmer et al fails to teach the wherein the means for activation condition comprises a means for sensing remote activation signal whereby the response can be caused to be exhibited by remote activation signal; wherein the means for sensing an activation condition comprises a means for sensing an infrared activation signal; wherein the means for sensing an activation condition comprises a means for sensing a sound signal; wherein the means for exhibiting a response based on the occurrence of the activation conditions comprises a light source for being activated in response to a remote activation signal; wherein the means for exhibiting a response based on the occurrence of the activation condition comprises a sound source for being activated in response to a remote activation signal.

Gick teaches the wherein the means for activation condition comprises a means for sensing remote activation signal whereby the response can be caused to be exhibited by remote activation signal; wherein the means for sensing an activation condition comprises a means for sensing an infrared activation signal; wherein the means for sensing an activation condition comprises a means for sensing a sound signal; wherein the means for exhibiting a response based on the occurrence of the activation conditions comprises a light source for being activated in response to a remote activation signal; wherein the means for exhibiting a response based on the occurrence of the activation condition comprises a sound source for being activated in response to a remote activation signal (see par. [0019]).

Therefore it would have been obvious to one of ordinary in the art at the time the

Art Unit: 3714

invention was made to make this combination of prior arts so as to include a way to activate the response of a light source or sound source so as to produce an output of light or sound when the activation condition is satisfied.

4. Claims 15-21,48, and 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrimmer et al (US 6,042,487) in view of Dykstra et al (US 5,066,011) and further in view of Faulkner (US 3,426,121). The teachings of Dykstra et al and Schrimmer et al have been discussed above.

Re claim 15-21,48, and 57-59: Schrimmer et al teaches a high impact ball (10) comprising: at least one surface deviation / *dimples* (44) disposed relative to the spherical member of the core structure (34); at least one corresponding surface deviation disposed relative to the spherical casing (40) in a mating relationship with the at least one surface deviation (44) disposed relative to the spherical member of the core structure (**see fig.2; col.5, lines 25-35**).

However, Schrimmer et al fails to teach further comprising a plurality of positioning stays that each project from the spherical member of the core structure an amount substantially equal to a radial thickness of the spherical casing whereby the plurality of positioning stays can ensure a concentric relationship between the spherical member of the core structure and the spherical casing; wherein each of the plurality of positioning stays comprises a generally rigid strand of material that projects radially from the spherical member of the core structure; wherein the spherical casing is formed by injection molding; further comprising a spherical shell disposed to envelope the spherical casing and the core structure;

Art Unit: 3714

wherein spherical shell has a generally smooth exterior surface.

Faulkner teaches further comprising a plurality of positioning stays (26,28,30,32) that each project from the spherical member of the core structure an amount substantially equal to a radial thickness of the spherical casing whereby the plurality of positioning stays can ensure a concentric relationship between the spherical member of the core structure and the spherical casing; wherein each of the plurality of positioning stays comprises a generally rigid strand of material that projects radially from the spherical member of the core structure (see fig.4; col.2, lines 29-32); wherein the spherical casing is formed by injection molding and includes cooling the spherical casing by an active cooling method; further comprising a spherical shell disposed to envelope the spherical casing and the core structure (see fig.4; col.2, lines 45-61); wherein spherical shell has a generally smooth exterior surface.(see fig.4).

Therefore it would have been obvious to one of ordinary skill in the art at the time the inventions was made to include positioning stays so has to provide a support and a way to hold the inner core in place, and to used injection molding in this invention so has to fill the ball with the necessary material without affecting the set up of the inner core.

5. Claims 22-25,38-40,60, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrimmer et al (US 6,042,487) in view of Dykstra et al (US 5,066,011) and further in view of Cavallaro et al (US 3,426,121) and Kumasaka et al (US 4,463,951). The teachings of Dykstra et al and Schrimmer et al have been discussed above.

Re claim 22-25,60, and 61: Schrimmer et al teaches a high impact ball (10) with core.

However, Schrimmer et al fails to teach wherein the spherical member of the core structure is formed from a polycarbonate resin under a high pressure injection molding process, wherein the spherical casing is formed from a high density silicone under an injection molding process, and wherein the spherical shell is formed under an injection molding process; further comprising a lightweight spherical layer with a specific gravity of less than 1; wherein the high impact game ball has a specific gravity of not greater than 1; wherein the lightweight spherical layer comprises an aerogel.

Cavallaro et al teaches wherein the spherical member of the core structure is formed from a polycarbonate resin under a high pressure injection molding process, wherein the spherical casing is formed from a high density silicone under an injection molding process, and wherein the spherical shell is formed under an injection molding process (see col.1, lines 11; col.3, lines 1-12).

Kumasaka et al teaches further comprising a lightweight spherical layer with a specific gravity of less than 1; wherein the high impact game ball has a specific gravity of not greater than 1; wherein the lightweight spherical layer comprises an aerogel/ *foam* (see fig.1; col.2, lines 11-17).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to various materials which could include but not limited to polycarbonate resin, silicon, materials with specific gravity of less than 1, and aerogel, so has to give the invention the look and feel and functionality it is intended to have and also to provide a ball that will be enjoyable by the gamer using it.

Art Unit: 3714

Re claims 38-40: Schrimmer et al teaches a high impact ball (10) with core.

However, Schrimmer et al fails the game ball further comprising a lightweight spherical layer with a specific gravity of less than 1; wherein the high impact game ball has a specific gravity of not greater than 1; wherein the lightweight spherical layer comprises an aerogel.

Kumasaka et al teaches further comprising a lightweight spherical layer with a specific gravity of less than 1; wherein the high impact game ball has a specific gravity of not greater than 1; wherein the lightweight spherical layer comprises an aerogel/ *foam* (see fig.1; col.2, lines 11-17).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to various materials which could include but not limited to polycarbonate resin, silicon, materials with specific gravity of less than 1, and aerogel, so has to give the invention the look and feel and functionality it is intended to have and also to provide a ball that will be enjoyable by the gamer using it.

### ***Conclusion***


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miller teaches method of forming foam filled baseball or softball; Myers et al discloses illuminable ball; Green teaches illuminated game ball and method of play.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adetokunbo O. Torimiro whose telephone number is (571) 270-1345. The examiner can normally be reached on Mon-Fri (8am - 4pm).

Art Unit: 3714

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

AT



ROBERT E. PEZZUTO  
SUPERVISORY PRIMARY EXAMINER